

RD 40

**Instruction
Manual**

ARISTON AUDIO

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ARISTON ACOUSTICS LIMITED

RD 40 INSTRUCTIONS

Thank you for your purchase of the Ariston RD40 Turntable. The RD40 system is a new generation of turntable designed to represent the finest value for money together with the best performance, we at Ariston can produce. Based on our research and experience over long years the RD40 resolves many of the delicate problems associated with Super Quality Audiophile turntables, and finally brings the listening pleasure associated with these turntables within the reach of most discerning purchasers.

The RD40 is a system, and may be tailored to suit the needs of the individual. Its specification may include the following accessories:—

1. Isolating Base.
2. Cover.
3. D.C. Module.
4. Heavy Platter.
5. Adjustable Feet.
6. Heavy Springs.
7. Ariston Tone Arm.
8. Mass Rings.

Consult your dealer for details since most of these parts may be retro fitted.

INTRODUCTION

1. IMPORTANT INSTRUCTIONS

- 1.1 It is critical that the main bearing housing does not become contaminated by dust or any other foreign matter.
- 1.2 Do not attempt to dismantle the motor assembly as this unit is tuned during production to provide optimum performance.
- 1.3 Your Ariston turntable can be supplied for service on 220 - 240 volts 50 hz or 110 volts 60 hz A.C. mains supply. Before connecting to the mains supply, check both the supply voltage and other information on the rating plate on the rear of the unit. Motors coded white 200 - 240 volts 50hz A.C. Motors coded red 100 - 120 volts 60 hz A.C. These markings are placed on the top of the motor.

If required at any time, a mains supply conversion kit may be obtained from Ariston Acoustics Ltd., through your local Ariston agent.

2. GENERAL ASSEMBLY AND OPERATING INSTRUCTIONS

- 2.1 If no tone arm or cartridge is supplied, refer to section 3 in conjunction with the fitting instructions supplied with the tone arm and cartridge of your choice.
 - 2.2 Place the turntable on a flat surface and remove packing pieces as necessary.
 - 2.3 Place the entire contents of the Oil Vial supplied into the bearing housing. Should the housing require subsequent topping up, use a light machine oil.
 - 2.4 Fit the platter complete with drive belt allowing the shaft to descend gently into the bearing housing. **DO NOT USE FORCE.**
 - 2.5 With your index finger through one of the access holes in the platter, hold the drive belt in position ready to pass around the motor pulley. **See fig. 1.** The small pulley for $33\frac{1}{3}$ RPM, the large pulley for 45 RPM. (The last sentence is not applicable on the D/C version with electronic speed control).
 - 2.6 The platter and tone arm board may require levelling. This is achieved by rotating the spring adjusters on the top of the three spring satellites, anti-clockwise to raise, clockwise to lower. To carry out this operation, the platter, mat and tone arm are fitted in position. The chassis and platter should bounce in a free manner. Should the top of the satellite touch the spring adjuster stem, rotate the top of the satellites whilst holding the spring adjusters until the assembly is quite free. Adjust the suspension with the belt fitted. Whilst adjusting the three springs, bounce the platter gently in the area of the appropriate spring to ensure the suspension is entirely free. If a spirit level is employed please take into account that the platter is concave and therefore a correct reading may not be obtained. It is normally sufficient having ensured the turntable is on a level surface to set the suspension by sighting the bottom of the chassis to the base of the turntable. If a heavy tone arm is fitted, the centre of gravity of the assembly can be corrected by fitting mass rings which are available through your Ariston agent.
 - 2.7 Should the turntable have a tendency to shed its belt, check the motor is correctly seated in its housing, and the pulley is parallel to the platter. Do not carry out this operation whilst the turntable is connected to the mains electricity supply.
 - 2.8 It is recommended that for the purpose of bedding the bearing that the turntable be run in for a period of a few hours.
 - 2.9 When the tone arm and cartridge are fitted and properly adjusted the unit can be connected for operation.
 - 2.10 Ensure the tone arm is earthed through the amplifier, and if undue hum is detected, disconnect the mains earth to the turntable should your supply specify same.
 - 2.11 Ensuring the turntable speed is compatible with the record, the deck may be switched on.
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3. FITTING THE TONE ARM

- 3.1 Please refer to the relevant manufacturers instructions in all cases.
- 3.2 The tone arm board is removed for cutting and/or fitting the arm by withdrawing the retaining screws using the socket wrench supplied in the accessory pack.
- 3.3 Tone arm cables should be fed through the access hole to the inside of the turntable base, where they may be securely held with the tie supplied. The tie should be as tight as possible, and the tone arm cable between the tie and the tone arm should be sufficiently compliant to move with the turntable suspension, generally for that purpose it will be found that a couple of inches of cable should be allowed extra over the distance from tone arm to cable tie.
- 3.4 A tone arm earth point is provided on the sub chassis.
- 3.5 When the tone arm is correctly fitted, refer to section 2 for levelling the turntable.
- 3.6 When fitting a cartridge always adhere to the instructions provided by the manufacturer. To assist with fitting the cartridge to the carrier on the tone arm, an alignment protractor is supplied. Place the protractor over the turntable spindle and insert the cartridge stylus at the arrow point. The cartridge may then be tightened up in that position.

Dust on the stylus tip may cause a deterioration in sound quality, the diamond should be cleaned with a soft brush. Average age of an elliptical stylus is somewhere from 400 to 600 hours. It is advisable for optimum performance to replace it periodically.

4. SPECIAL INSTRUCTIONS

- 4.1 **Motor Clutch Assembly.** The clutch should be lubricated once every three months by placing a small drop of light machine oil between the pulley top and the clutch spring retaining washer Fig. 2 (standard motor Not DC).
- 4.2 The motor employed on the standard motor is a 24 pole AC synchronous type and by its nature will generate a vibration or imperceptible noise, neither will affect listening pleasure since the motor is totally isolated.
- 4.3 To maintain optimum performance, regularly clean the bearing housing with a cotton wool bud and top up with light machine oil, as necessary.
- 4.4 The periphery of the drive pulley and the belt should be kept free from any traces of oil or grease. Should they become contaminated, clean them with a lint free cloth dampened with lighter fuel or methylated or similar type spirit.
- 4.5 The mat may be cleaned with warm soapy water.

5. HINTS ON TUNING

Acoustic Feedback.

Acoustic Feedback occurs when the isolation of the pick up from the loudspeakers is inadequate. Vibrations from the latter are received by the pick up, turned into an electrical signal and returned via the amplifiers to the loudspeakers. The process is rapidly repeated and unless the equipment is switched off or the volume control retarded the resulting signal level may cause overload damage to the amplifiers and loudspeakers.

If feedback is suspected, carry out a simple check as follows:

- a) Switch off the turntable and place the stylus on a stationary record, slowly advance the volume control up to and a little beyond the normal maximum listening level.
- b) If and when feedback occurs it will be heard as a howl of rapidly rising intensity, so be ready to retard the volume control quickly.
- c) If the test shows that feedback occurs within or close to normal listening levels, attention should be given to the foregoing points.
- d) Experiment with the positioning of the turntable should reveal marked differences in the level of feedback. Ensure the sub chassis is not short-circuited and is quite free to move both vertically and horizontally.
- e) The spring suspension should be adjusted to as low a pitch as possible. The higher the platter and chassis sits on the turntable the greater acoustic feedback likelihood.

Mechanical Noise

There are various areas which may contribute to mechanical noise, the likeliest of these are the bearings which may require oil, the suspension which may be short-circuited or the motor. Check the electrics and all connections, ensure the wiring is correct for the electrical current and frequency.

Wow

The most likely source of wow is the drive belt, which may have become contaminated with oil. Remove the belt and clean it with lighter fuel, subsequently dusting it with chalk. Clean the belt faces on both the pulley and the hub with lighter fuel.

Rumble

As the word implies, this term describes the intermittent low frequency sounds heard through the loudspeakers and can be caused by foreign matter or imperfections in the moving parts of the turntable. The importance of mechanical excellence in these areas cannot be overstated since the pick up cannot discriminate between the information on the record and unwanted vibrations within the turntable. Always ensure the bearing is topped up with light machine oil. Ensure the sub chassis is decoupled.

6. SPECIAL INSTRUCTIONS

- 6.1 Remove the packing piece from under the motor pulley and fit the drive belt on the motor pulley and drive hub.

Small pulley for $33\frac{1}{3}$ r.p.m.

Large pulley for 45 r.p.m.

- 6.2 With your index finger through one of the access holes in the platter hold the drive belt in position ready to pass around the pulley (fig. 1).

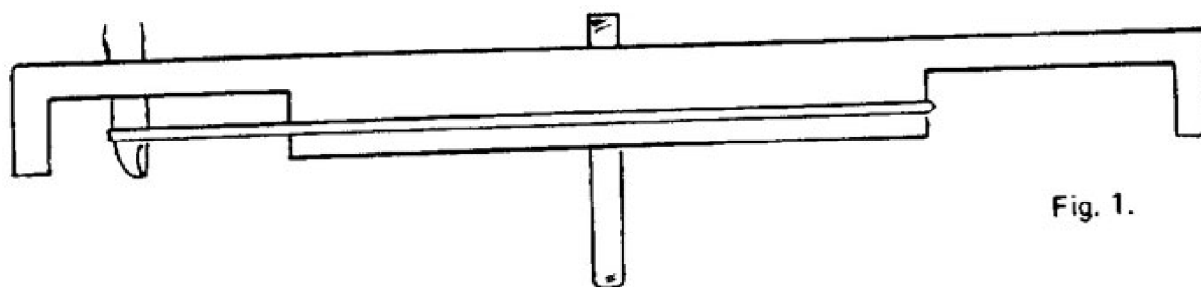


Fig. 1.

6.3 Motor Clutch Assembly.

The clutch assembly should be lubricated once every three months by placing a small drop of light machine oil between the pulley top and the clutch spring retaining washer (fig. 2).

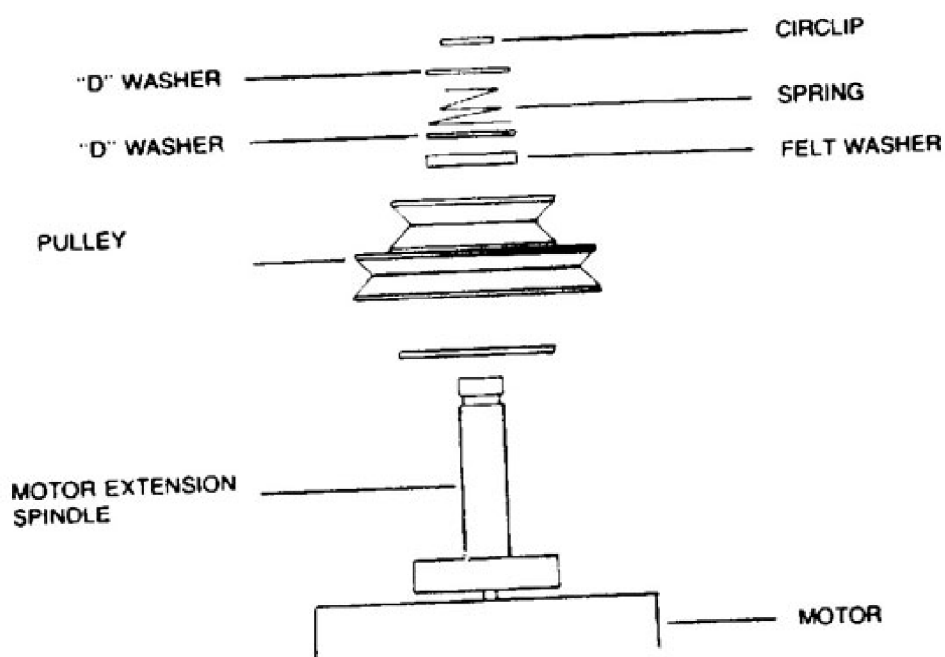
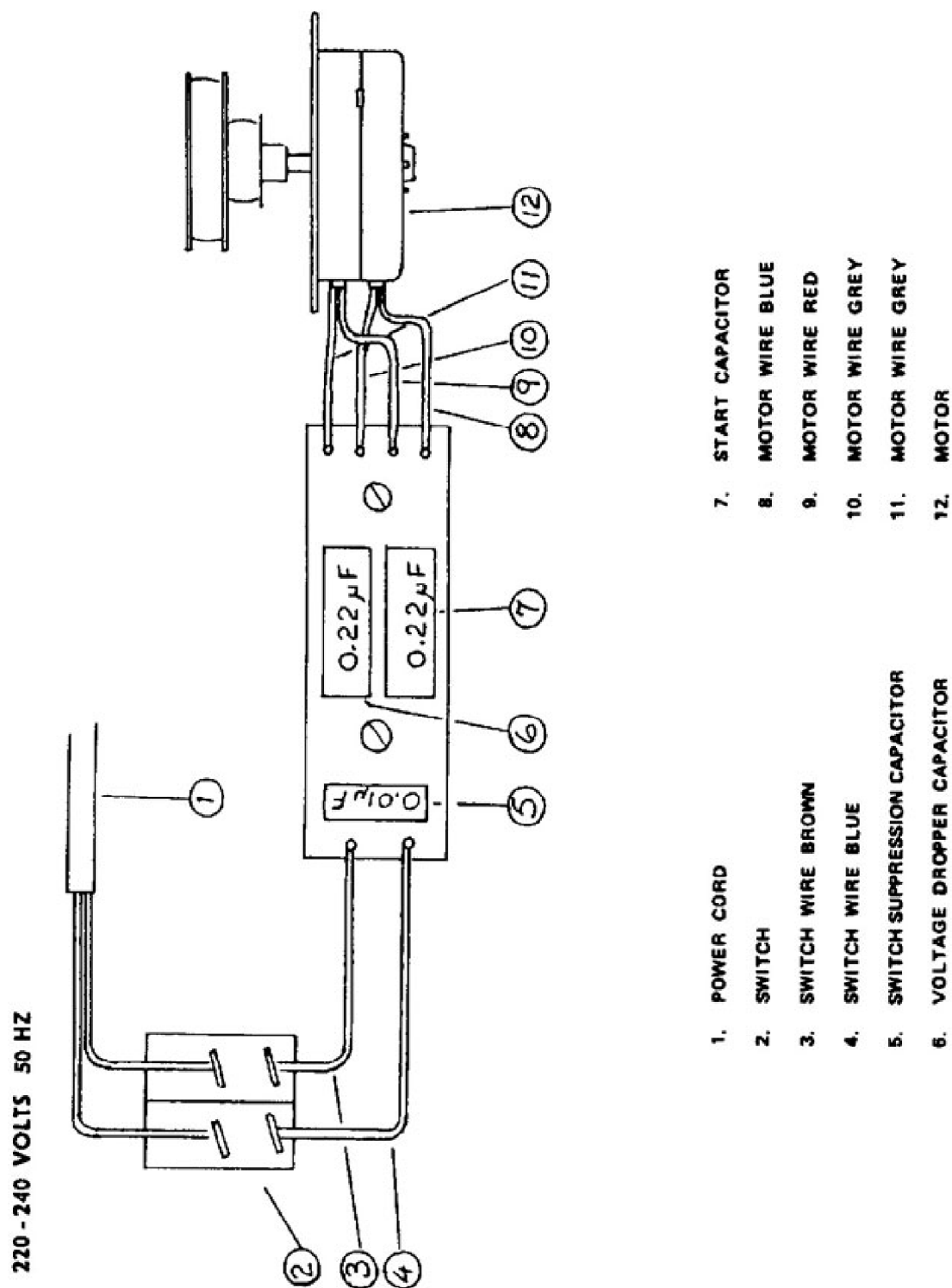
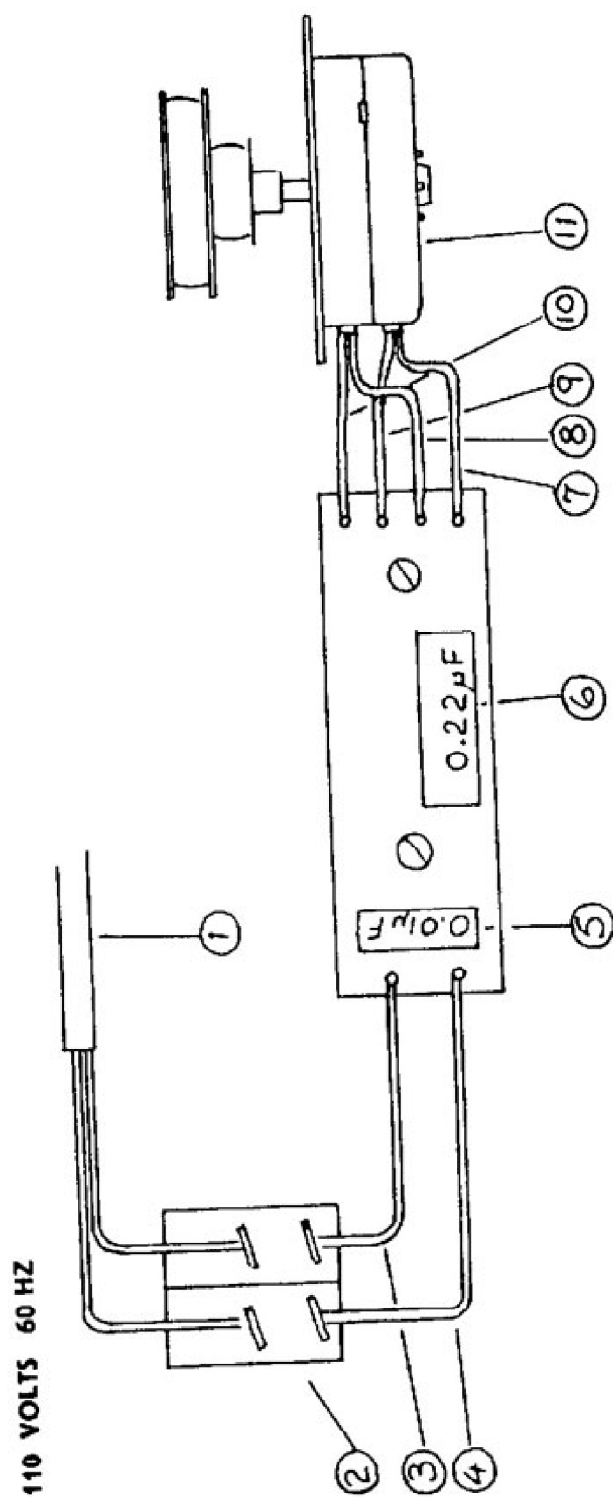


Fig. 2.

7. WIRING DIAGRAM — RD 40 A.C.



7. WIRING DIAGRAM — RD 40 A.C.



ARISTON ACOUSTICS LIMITED

Unit 176, Brieryside, Prestwick Airport,
Prestwick, Ayrshire KA9 2RB, Scotland

Ariston Acoustics Limited reserve the right to change the specifications without notice.
